

**REMARKS**

This amendment is responsive to the non-final Office Action dated October 3, 2005. Claims 1, 6-8, 12, 14, 16, and 21 have been amended. New claims 23-26 have been added to more completely cover other aspects of the invention. No new matter has been added. The claims pending in this application are 1-26. Reconsideration and allowance of all pending claims is respectfully requested.

**Rejections under 35 U.S.C. 102(b)**

Claims 1-11, 14, 15, 17, 18, 21, and 22 stand rejected under 35 U.S.C. 102(b) as being anticipated by Melcher (U.S. Patent 5,388,362). Claims 1, 14, and 21 are independent. The rejection is discussed first with respect to the independent claims which are addressed in turn below.

Independent claim 1 recites *inter alia* a locking member movable into and out of engagement with the sear in response to removing the magazine from and inserting the magazine into the pistol. Claim 1 has been amended to further require “the locking member pivotally mounted on the hammer pin and further comprising a hook configured to engage the sear when the magazine is removed to prevent the sear from moving and releasing the hammer while held in the cocked position by the sear.” Support for this amendment is found, for example, at least in Applicant’s FIGS. 2 & 3. Melcher clearly does not teach or fairly suggest a locking member mounted on the hammer pin or a hook to engage the sear. To the contrary, Melcher discloses a safety plate 32 pivotally mounted on a separate dedicated pin 38, not the hammer pin, which engages a sear cam 60. Melcher further completely lacks a hook as required by claim 1. To block movement of the sear cam 60 when the trigger is pulled without the magazine present, Melcher discloses that safety plate 32 is made to “bear against” the sear cam. (Melcher, Col. 7, lines 8-21 and FIGS. 7-9). In contrast to Applicant’s claimed hook therefore, the safety plate blocks the sear cam by abutting surface contact between these two components. Accordingly, claim 1 is clearly distinguishable from Melcher.

Because each and every limitation of claim 1 is not disclosed by Melcher, claim 1 is not anticipated and believed to be allowable. MPEP 2131 (citing *Verdegaal Bros. v. Union Oil Co. of Calif.*, 814 F.2d 628 (Fed. Cir. 1987)). Claims 2-11 depend directly or indirectly from claim 1

and include all of its limitations. These dependent claims are allowable for at least the same reasons as claim 1, and for the additional limitations added by these dependent claims which further distinguish over Melcher.

Independent claim 14 requires a “locking member pivotally mounted in the frame and further comprising a hook configured to engage and prevent the sear from moving.” For at least the same reasons presented above for claim 1, Melcher clearly does not teach or fairly suggest a locking member comprising a hook to engage the sear. Accordingly, claim 14 is believed to be allowable. Claims 15, 17, and 18 depend directly or indirectly from claim 14 and include all of its limitations. These dependent claims are allowable for at least the same reasons as claim 14, and for the additional limitations added by these dependent claims which further distinguish over Melcher.

Independent claim 21 similarly requires “moving a locking member having a hook simultaneously with removing the magazine” and “engaging the hook with the sear to prevent the sear from moving to release the cocked hammer and discharging the pistol.” For at least the same reasons presented above for claim 1, Melcher clearly does not teach or fairly suggest a locking member comprising a hook to engage the sear. Accordingly, claim 21 is believed to be allowable. Claim 22 depends from claim 21 and includes all of its limitations. Claim 22 is allowable for at least the same reasons as claim 21, and for the additional limitations added by this dependent claim which further distinguish over Melcher.

#### **Rejections under 35 U.S.C. 103(a)**

Claims 12, 13, 16, 19, and 20 stand rejected under 35 U.S.C. 103(a) as being obvious over Melcher in view of Lenkarski (U.S. Patent 5,438,784). Claims 12 and 13 depend from independent claim 1. Claim 12 has been amended and the rejection is rendered moot in light of the revised claim language. Claims 16, 19, and 20 depend from independent claim 14. In an effort to expedite prosecution, the Examiner’s rejection is prospectively addressed with respect to amended independent claims 1, 14, and 21 which now include *inter alia* the hook limitation from original dependent claims 12 and 16. The rejection with regards to claims 13, 16, 19, and 20 is respectfully traversed for reasons discussed below and which is addressed following discussion of the independent claims.

With reference to the above discussion, independent claim 1 has been amended to require “the locking member pivotally mounted on the hammer pin and further comprising a hook configured to engage the sear when the magazine is removed to prevent the sear from moving and releasing the hammer while held in the cocked position by the sear.” Neither Melcher nor Lenkarski teach or fairly suggest, alone or in combination, a magazine disconnect mechanism as now claimed. Accordingly, claim 1 is clearly distinguishable from Melcher which does not disclose or fairly suggest either the claimed hook or locking member being mounted on the hammer pin. Lenkarski does not make up the deficiencies of Melcher. Although Lenkarski may disclose a safety lever 20 having a recess 38 (“hook”), Lenkarski does not disclose mounting such a safety lever on the hammer pin as required by claim 1. Indeed, unlike Melcher, the Lenkarski pistol is a striker-fired pistol and does not even have a hammer. The safety lever 20 in Lenkarski is mounted on a separate, dedicated pin to the rear of the firing mechanism (*see, e.g.*, Lenkarski FIG. 2). Claim 1 is further distinguishable from Lenkarski because the recess 38 or “hook” in Lenkarski is not “configured to engage the sear” as required by Applicant’s claim. By contrast, Lenkarski discloses that safety lever 20 engages a movable sear pin 32, not the sear, to block forward and downward movement of a swing arm 40 that cards the sear “so that rearward movement of the trigger bar 9, required to fire the gun, will not occur.” (*See generally* Lenkarski, Col. 3, lines 57-63 and FIG. 2.) Thus, Lenkarski is not configured to engage the sear.

Accordingly, claim 1 as amended is not obvious because “all the claim limitations must be taught or suggested by the prior art” to establish a prima facie case of obviousness. *See* MPEP 2143.03 (citing *In re Royka*, 490 F.2d 981 (CCPA 1974)). Considering the invention as a whole, Applicant’s novel mounting of a locking member with a hook on the hammer pin advantageously provides a compact magazine-actuated disconnect mechanism for a hammer-fired pistol that conserves precious limited internal space within the pistol. This arrangement does not increase the size of the pistol which is beneficial because compactness is highly desirable to consumers. Furthermore, manufacturing expense of providing and assembling a separate pin is avoided. The arrangement as now claimed by the Applicant is not taught or suggested by Melcher or Lenkarski, either alone or in combination.

Furthermore, there would be no motivation or suggestion to combine Melcher and Lenkarski to arrive at Applicant’s claimed invention with respect to the hook limitation as cited

in the Office Action for several reasons. First, Lenkarski discloses a striker-fired type firing mechanism while Melcher discloses a different hammer-fired type firing mechanism. The striker mechanism relies on a reciprocating axially-movable striker that is pulled straight back axially by the sear and then released thereby to move forward and strike a firing pin for discharging the pistol. The hammer mechanism relies on rotating hammer that is pivotally cocked backwards by the sear and then released thereby to strike a firing pin. Accordingly, the sear performs quite different functions in each type of firing mechanism which are distinct. Thus, there would be no motivation for one skilled in the art to modify Melcher to include a hook based on the teachings of Lenkarski. Each reference is complete in itself with regards to disclosing a magazine disconnect for their respective type of firing mechanism. There is no suggestion in either reference to make such a modification.

Moreover, motivation to combine and modify in this case is lacking because one skilled in the art would not find it desirable or necessary to modify the Melcher safety plate to incorporate the hook from Lenkarski. There simply is no need for a hook in Melcher, which if provided would not function properly due to the relative mounting positions of the safety plate and sear cam. In Melcher, sear cam 60 “moves forward and up when the trigger is pulled” to cock the hammer (*see* Melcher, Col. 7, lines 4-8 and FIGS. 7-9). Due to this motion, Melcher mounts a toggle-type safety plate 32 (having a central pivot hole 48, as shown in FIG. 3) in front of sear cam 60 to block its upward and forward movement via points 62, 64 of the safety plate which “bear against” the sear cam. (Melcher, Col. 7, lines 8-21 and FIGS. 3, 7-9.) By contrast, as discussed above, Lenkarski discloses a safety lever 20 that engages a movable sear pin 32 to block forward and downward movement of a swing arm 40 that cards the sear. The safety lever 20 is mounted behind sear pin 32. Therefore, unlike Melcher, Lenkarski provides a hook that must necessarily function to hold back, not block, movement of a firing mechanism component. Melcher and Lenkarski thus teach two distinct approaches to physically arresting movement of the firing mechanism. Accordingly, there would be no desirability of combining the hook in Lenkarski with the safety plate in Melcher which is perfectly suitable for its design as noted above. *See Winner Int’l Royalty Corp. v. Wang*, 202 F.3d 1340 (Fed. Cir. 2000) (motivation to combine requires desirability of making the combination, not merely a trade-off). Furthermore, it would impermissibly require substantial modification of the mechanism in Melcher and

completely change its mode of operation to include the hook of Lenkarski. *In re Ratti*, 270 F.2d 810 (CCPA 1959). Even assuming *arguendo* that Melcher and Lenkarski were to be combined, the resulting combination would still not result in a hammer-fired pistol having a locking member with a hook that engages the sear and which hook is mounted on the hammer pin as required by claim 1. Such an arrangement would not be made without the hindsight knowledge of the Applicant's own teachings which is an improper basis for obviousness. *W.L. Gore & Assocs. v. Garlock, Inc.*, 721 F.2d 1553 (Fed. Cir. 1983).

For all of the foregoing reasons, claim 1 is not obvious and believed to be allowable. Claim 13 depends directly from claim 1 and includes all of its limitations. Therefore, claim 13 is allowable for at least the same reasons as claim 1, and for the additional limitation of the hook further comprising "a generally square-shaped recess configured to engage a complimentary square-shaped protrusion on the sear" which further distinguishes over Melcher and Lenkarski. Neither Melcher nor Lenkarski teach or suggest such a shaped hook and sear that are mutually engageable to lock the sear in position.

As discussed above, independent claims 14 and 21 include the hook limitation like claim 1. Accordingly, claims 14 and 21 are not obvious and believed to be allowable for at least the same reasons discussed above regarding claim 1 as applicable. Moreover, claims 14 and 21 further require the sear being mounted to the frame on a stationary pin. This further distinguishes Applicant's claimed invention from Lenkarski which discloses a recess or hook that engages a movable pin 32 that is part of Lenkarski's arrangement for a striker-fired firing mechanism. The claimed combination in claims 14 and 21 is not taught or fairly suggested by Lenkarski or Melcher, either alone or in combination. Considering the invention as whole, Applicant's invention as recited in claims 14 and 21 provides a novel magazine-actuated disconnect mechanism for a hammer-fired pistol that directly arrests movement of the sear. Accordingly, claims 14 and 21 are further believed to be allowable for this additional basis.

Claim 16 depends directly from claim 14 and includes all of its limitations. Therefore, claim 16 is allowable for at least the same reasons as claim 14, and for the additional limitation of the hook further comprising "a generally square-shaped recess configured to engage a complimentary square-shaped protrusion on the sear" which further distinguishes over Melcher

and Lenkarski. Neither Melcher nor Lenkarski teach or suggest such a shaped hook and sear that are mutually engageable to lock the sear in position.

Claims 19 and 20 depend directly or indirectly from claim 14 and includes all of its limitations. Therefore, claims 19 and 20 are allowable for at least the same reasons as claim 14, and for the additional limitations of a trigger hook that engages a catch on the magazine to prevent the magazine from being removed from the pistol if the trigger is partially pulled. Neither Melcher nor Lenkarski, alone or in combination, teach or fairly suggest such an arrangement as required by claims 19 and 20 which are allowable on this additional basis.

### New Claims

New claims 23-26 have been added to more completely cover other aspects of the invention. No new matter has been added. Independent claims 23 and 25 include the hook limitation for the locking member similarly to claims 1, 14, and 21. Accordingly, these claims are distinguishable from Melcher and Lenkarski for at least the reasons presented herein for claims 1, 14, and 21. Claim 23 further requires “a frame defining an open cavity to receive a magazine having a catch on an outer surface” and “a trigger ... including a hook configured to engage the magazine catch.” Support for these limitations is found in Applicant’s disclosure at least in paragraph 10 and FIGS. 2, 3, 4, and 6. Advantageously, the claimed trigger hook and catch arrangement helps prevent a user from defeating the magazine disconnect mechanism by partially pulling the trigger and then removing the magazine (*see* Applicant’s Background of the Invention, ¶ 3). Neither Melcher nor Lenkarski, alone or in combination, teach or fairly suggest such an arrangement as required by claim 23. Accordingly, new claim 23 and claim 24 which depends from claim 23 and adds additional limitations are both believed to be allowable.

In addition to the hook limitation for the locking member, new independent claim 25 further requires the locking member including “a straight portion and an angled portion that laterally protrudes at an angle to the longitudinal axis of the pistol into the magazine cavity and contacts the magazine as it is inserted into the pistol to displace the locking member to the non-locking position.” Support for this limitation is found in Applicant’s disclosure at least in paragraph 56 and FIGS. 11-14 and 18. The angled portion works in conjunction with mounting the locking member on the hammer pin (adjacent the hammer) to provide positive contact with

the magazine as it is inserted into and removed from the pistol since this mounting position places the locking member somewhat near the lateral side of the pistol grip. Neither Melcher nor Lenkarski, alone or in combination, teach or fairly suggest such an arrangement as required by claim 25. Accordingly, new claim 25 and claim 26 which depends from claim 25 and adds additional limitations are both believed to be allowable.


In light of the foregoing remarks and claim amendments, Applicant respectfully requests reconsideration and submits that the pending claims 1-26 are in condition for allowance. An early notice to this effect is earnestly solicited. The Examiner is respectfully invited to call the undersigned attorney at 212-309-6375 if a telephone call could help resolve any remaining issues related to the allowance of any of the claims.

Respectfully submitted,

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